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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,932	03/16/2004	Katsuhiko Ito	HGM-138-A	2331
21828	7590	09/23/2005	EXAMINER	
CARRIER BLACKMAN AND ASSOCIATES 24101 NOVI ROAD SUITE 100 NOVI, MI 48375			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,932

Applicant(s)

ITO ET.AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hayashi et al. The angle detector (111, e.g. fig 3) is connected to the rolling member (22) by a shaft (113) in a groove (114), which allows some axial misalignment.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-13 are rejected under 35 U.S.C. § 103 as being unpatentable over Japan 2001-343,060 in view of . Japan 2001-343,060 discloses a swash plate hydraulic unit comprising a plurality of plungers slidably disposed in respective plunger holes of a rotatable cylinder; a swash plate (86), rotatably supported by a casing, with a rolling axis perpendicular to the axis of rotation of the cylinder, contacting an end of the plungers and connected to one end of a rotation connection mechanism (e.g. 121), by a rolling member (83) connected to the swash plate; a swash plate tilting angle detector (121, 212) having an angle detector mounted to the casing, coaxial to the rolling axis, and connected to another end of the rotation connection mechanism; but does not disclose

Art Unit: 3745

that the rotation connection mechanism transmits the tilting of the swash plate to the angle detector, even when the portion of the angle detector connected to the rotation connection mechanism is inclined at an angle to the tilt axis; wherein the rotation connection mechanism include first and second connection rods connected to the swash plate and angle detector, respectively, and a movable joint connecting the first and second connecting rods together; wherein the movable joint is a pin.

Orlando et al teaches, for a rotation connection mechanism (212) having one end connected to a first element (146), whose angle is measured, and another end connected to an angle detector (36) mounted to a casing (e.g. 204) coaxially to the first element; that the rotation connection mechanism allows rotation of the angle detector, while allowing slight axial misalignment between the angle detector and first element (column 7 line 12-17).

Machine Design teaches that a universal joint can be used to allowing misalignment between two connected rotating shafts (page 167-168).

Snyder teaches a universal joint having a movable joint connecting first and second connecting rods (18, 22) together; wherein the movable joint is a pin (38).

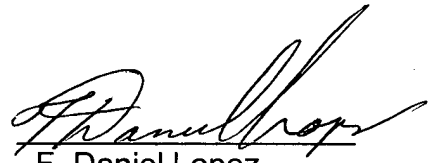
Since Japan 2001-343,060 discloses a rotation connection mechanism between an angle detector and a coaxial rolling mechanism, since Orlando et al teaches a need for a rotation connection mechanism which allows minor axial misalignment, since Machine Design teaches that a universal joint is a rotation connection mechanism which allows minor axial misalignment, and since Snyder teaches that a universal joint can include a movable joint connecting first and second connecting rods (18, 22) together; wherein the movable joint is a pin; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the rotation connection mechanism of Japan 2001-343,060 include a movable joint connecting first and second connecting rods together; wherein the movable joint is a pin, as taught by Snyder, for the purpose of allowing slight axial misalignment between the angle detector and rolling mechanism, as taught by Orlando et al and Machine Design.

Art Unit: 3745

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745

September 19, 2005